

**REPORT OF PROCEEDINGS BY INVESTIGATING OFFICER**

Note Completed forms may contain personally identifiable information and require handling as set forth in AR 340-21  
For use of this form, see AR 15-6, the proponent agency is OTJAG.

IF MORE SPACE IS REQUIRED IN FILLING OUT ANY PORTION OF THIS FORM, ATTACH ADDITIONAL SHEETS

**SECTION I - APPOINTMENT**

Appointed by MG Michael A. Calhoun, The Adjutant General, Florida National Guard  
(Appointing authority)

on 20180627 (Date) (Attach enclosure 1 Letter of appointment or summary of oral appointment data.) (See para 3-15, AR 15-6)

**SECTION II - TIMELINE**

1. The (investigation) commenced at Camp Blanding Joint Training Center, FL at 0700  
(Place) (Time)  
on 20180705  
(Date)

2. The (investigating officer) finished gathering/hearing evidence a 1500 on 20180824 and completed  
(Time) (Date)  
findings and recommendations at 1700 on 20180826  
(Time) (Date)

**SECTION III - CHECKLIST FOR PROCEEDINGS****A. COMPLETE IN ALL CASES**

YES NO<sup>1/</sup> NA<sup>2/</sup>

1. Enclosures (para 3-13, AR 15-6)			
Are the following enclosed and numbered consecutively with Roman numerals (Attached in order listed)			
a The memorandum of appointment?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b All other written communications to or from the appointing authority?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c Privacy Act Statements (Certificate, if statement provided orally)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d Explanation by the investigating officer of any unusual delays, difficulties, irregularities or other problems encountered (e.g., absence of material witnesses)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e Any other significant papers (other than evidence) relating to administrative aspects of the investigation?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f An Executive Summary Index of Exhibits Chronology of the investigation and lists of all persons interviewed and evidence gathered (Complex, serious and/or high profile cases)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2. Exhibits (para 3-14, AR 15-6)			
a. Are all items offered (whether or not received) or considered as evidence individually numbered or lettered as exhibits and attached to this report?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
b. Is an index of all exhibits offered to or considered by investigating officer attached before the first exhibit?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
c. Has the testimony/statement of each witness been recorded verbatim or been reduced to written form and attached as an exhibit?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
d. Are copies, descriptions, or depictions (if substituted for real or documentary evidence) properly authenticated and is the location of the original evidence indicated?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
e. Are descriptions or diagrams included of locations visited by the investigating officer (Appendix C-3, AR 15-6)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
f. Is each written stipulation attached as an exhibit and is each oral stipulation either reduced to writing and made an exhibit or recorded?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

FOOTNOTES: <sup>1/</sup> Explain all negative answers on an attached sheet.

<sup>2/</sup> Use of the N/A column constitutes a positive representation that the circumstances described in the question did not occur in this investigation

**SECTION IV - FINDINGS (para 3-10, AR 15-6)**

The (investigating officer), having carefully considered the evidence, finds: *[Each paragraph should be one conclusion based on the evidence gathered during the investigation. These findings should provide answers to each question posed by the appointing authority in the appointment memorandum. The evidence that supports each finding must be cited.]*

See attached Memorandum for MG Michael A. Calhoun, The Adjutant General., Florida National Guard, Subject: Findings and Recommendations IAW AR 15-6 Investigation – Death of SPC Cayln McLemore, 326th Chemical Company (USAR) – Final Land Nav Test of BLC - CBJTC.



**SECTION V - RECOMMENDATIONS (para 3-11 AR 15-6)**

In view of the above findings, the (investigating officer) recommends: [Each paragraph should be one recommendation based on the findings in Section IV. Address what actions, if any, should be taken with regard to the individuals involved, the unit leadership, and any steps that can be taken to prevent the occurrence in the future. Recommendations do not need to be adverse or punitive. For example, the investigation results can be used as a training tool.]

See attached Memorandum for MG Michael A. Calhoun, The Adjutant General, Florida National Guard, Subject: Findings and Recommendations IAW AR 15-6 Investigation – Death of SPC Cayln McLemore, 326th Chemical Company (USAR) – Final Land Nav Test of BLC - CBJTC.

To summarize, the recommendations are as follows:

- a. FLNG should close the current investigation into the training fatality of SPC McLemore with a finding that his death was accidental and a finding of no culpability on the part of CBJTC, RTI-FL, or the BLC leadership and/or cadre.
- b. FLNG should formally recognize civilian partners in the search and rescue efforts to reward their extraordinary help and encourage their assistance in the future, to include CCSO, FHP, and other law enforcement agencies who provided tremendous effort on short notice.
- c. Although not a factor in this incident, CBJTC should designate responsibility on post to conduct and communicate hourly WBGT readings when Soldiers are conducting field training and it is suspected that the Heat Category Index may be 3 or higher at some point during the day.

(b)(5)

(b)(5)

(b)(5)

g. RTI-FL should continue their extraordinary efforts to emphasize and train heat injury prevention and hydration throughout BLC and other courses.

h. RTI-FL should continue the best practice of allowing students to take personal cell phones on field training as an emergency communications back-up.

SECTION VI - AUTHENTICATION (para 3-15, AR 15-6)

THIS REPORT OF PROCEEDINGS IS COMPLETE AND ACCURATE.



b6 + b(7)(C)

(Investigating Officer)

SECTION VII - ACTION BY APPROVING AUTHORITY (para 2-8, AR 15-6)

The findings and recommendations of the (investigating officer) are:

a) Approved.

PROVIDE COPY TO RTI COR.

b) Approved with the following modifications:

(1) The following findings of fact are added/deleted:

(2) The following findings of fact are modified as follows:

(3) The following recommendations are added/deleted:

(4) The following recommendations are modified as follows:

(5) The action recommended in recommendation \_\_\_\_\_ has been accomplished by \_\_\_\_\_

(6) Recommendation(s) \_\_\_\_\_ is not appropriate for action by this command; however, a copy of this investigation is being furnished to \_\_\_\_\_ for such action as deemed appropriate.

c) Disapproved.

d) The report is (incomplete), (ambiguous), (erroneous) and/or (specify deficiency) with respect to \_\_\_\_\_

It is, therefore, hereby returned to the IO for corrective action as follows \_\_\_\_\_





**DEPARTMENT OF THE ARMY**  
**FLORIDA ARMY NATIONAL GUARD**  
**HEADQUARTERS 164TH AIR DEFENSE ARTILLERY BRIGADE**  
8385 Daetwyler Drive, Orlando, Florida 32827

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26 August 2018

MEMORANDUM FOR MG Michael A. Calhoun, The Adjutant General,, Florida National Guard, St. Francis Barracks, Post Office Box 1008, St. Augustine, Florida 32085-1008

SUBJECT: Findings and Recommendations IAW AR 15-6 Investigation – Death of SPC Cayln McLemore, 326<sup>th</sup> Chemical Company (USAR) – Final Land Nav Test of BLC - CBJTC

1. References:

- a. Appointment Order, dated 27 June 2018 [Enclosure 1].
- b. Extension Request, dated 23 July 2018 [Enclosure 2].
- c. Extension Approved, dated 7 August 2018 [Enclosure 3].
- d. Public Records Request Memo, dated 12 July 2018 [Enclosure 4].
- e. TRADOC Regulation 350-29, Prevention of Heat and Cold Casualties, dated 18 July 2016 [Enclosure 5].
- f. Worksheet for Telephonic Notification of Ground Accident, 20 June 2018 [Enclosure 6].
- g. Serious Incident Report 2, 22 June 2018 [Enclosure 7].
- h. Army Regulation (AR) 15-6, Procedures for Administrative Investigation and Boards of Officers [not enclosed].

2. Background. On 27 June 2018, TAG-FL appointed me as an Investigating Officer pursuant to AR 15-6. The purpose of the investigation was to determine the facts and circumstances surrounding the death of SPC McLemore on or about 22 June 2018.

3. Summary. Basic Leadership Course (BLC) student SPC Cayln McLemore passed away in the afternoon of Wednesday, 20 June 2018 from environmental heat exposure (aka acute hyperthermia or heat stroke) in Training Area S4 while taking a Land Navigation Course Exam at Camp Blanding Joint Training Center (CBJTC), Florida. The subsequent Search and Rescue (SAR) effort was both timely and professionally executed, quickly escalating from an initial 80 BLC cadre and students to the use of multiple helicopters and almost 400 personnel over a 55 hour time span. SPC

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McLemore's remains were discovered on Friday, 22 June 2018. Subsequent investigation revealed that the RTI-FL executed a professional BLC. The BLC sufficiently emphasized hydration, had in place adequate safety measures, and generally followed TRADOC Regulation 350-29. SPC McLemore was in good physical shape and adequately acclimated to the high heat and humidity of CBJTC prior to the start of the Land Navigation Course Exam. Water was found in SPC McLemore's canteen mere feet from where his remains were found, so lack of water was not the cause-in-fact of his death. Recommendations include closing the current investigation into the training fatality of SPC McLemore with a finding that his death was accidental and with a finding of no culpability on the part of CBJTC, RTI-FL, or the BLC leadership and/or cadre.

#### 4. Overview.

a. I was initially contacted about potential assignment as an investigating officer on the late afternoon of 26 June 2018 and subsequently appointed as investigating officer on 27 June 2018. At the time, I informed my contact with JFHQ-FL [REDACTED] b6 [REDACTED] that I could not begin the investigation until after 4 July 2018 because of civilian employment responsibilities. Further, the RTI-FL had scheduled block leave for the period from 30 June 2018 through 6 July 2018 and all BLC student witnesses had departed the day of my appointment.

b. I began the investigation in the early morning of 5 July 2018 by carefully reviewing materials and traveling to CBJTC. I had made prior contact with a United States Army Reserve investigating officer, [REDACTED] b6 [REDACTED] who had been directed by the USAR Commanding General to investigate the same facts and circumstances I was investigating. After some discussion between our respective Staff Judge Advocates (SJA) and ourselves, we decided to work collaboratively as described in AR 15-6, Procedures for Administrative Investigations and Boards of Officers, dated April 2016, which states "in cases of concurrent investigations, Investigating Officers should coordinate with the other command or agency to avoid duplication of effort wherever possible." We agreed that I would question and swear witnesses that were under Title 32 authority, while he would question and swear witnesses under Title 10 authority. We should share all information and products to ensure a transparent investigation and consistent findings and recommendations. This economy of effort proved to be mutually beneficial and rewarding.

c. I was on orders from 5-13 July 2018 (9 duty days), again from 28-30 July 2018 (3 duty days) and performed numerous extra hours of work on weekends and in the evening after my civilian workday. I conducted most of my investigation at CBJTC, and personally visited Training Area S4 on three separate occasions, including two visits to the location where SPC McLemore's remains were discovered. On the second visit I found his canteen hidden by dense brush mere feet from where he was found, and it still contained water.



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d. Because of the complex and thorough nature of the investigation and expected delays in the publication of the District 4 Medical Examiner's Examination Report and Clay County Sheriff's Office Incident/Investigation Report, I requested a 30 day extension on 23 July 2018, with a new suspense of 27 August 2018. Once complete, the report of my investigation was sent to the TAG-FL SJA for legal review on 27 August 2018. My retirement due to MRD will be 31 August 2018.

## 5. Summary of Relevant and Material Facts.

### a. Basic Leadership Course Instructor Qualifications and Training.

(1) The 211 REGT (RTI-FL) was responsible for 2/211 NCOA BN, which conducted the BLC NCOES course at CBJTC. 3/211 NCOA BN BLC Class 008-18 at CBJTC scheduled to run from 4 June 2018 until 26 June 2018 [Exhibit 1]. RTI-FL was accredited to instruct BLC as per an accreditation inspection conducted 19 March 2018 to 23 March 2018 by the proponent on behalf of the U.S. Army Training and Doctrine Command (TRADOC) [Exhibit 2]. RTI-FL scored 97.1 during this accreditation inspection [Exhibit 2].

(2) BLC instructors were all USASMA certified, completing a 15 day instructor course certification, followed by 40 hours as an assistant instructor, and 40 hours on the podium as a primary instructor [Exhibit 3, response to Question 6]. This was verified by the recent accreditation inspection [Exhibit 2, page 16, item 6.c]. BLC Class 008-18 contained 77 students, ranging in ranks of SPC, CPL, and SSG [Exhibit 4].

(3) The 211 REGT had duly appointed Range Safety Officers, a Unit Safety Officer, Unit Safety NCOs, and a Unit Safety Council [Exhibit 5, generally]. Range Safety Officers were appointed on 01 January 2017 to oversee safety of the "S3/S4 Land Navigation Course" and included four of the BLC instructors: (b)(6); (b)(6); (b)(6); [Exhibit 5, first memo]. The Unit Safety NCOs were appointed on 30 April 2018 and included two of the BLC instructors: (b)(6) and (b)(6) [Exhibit 5, third memo]. The Unit Safety Council met quarterly, with the three most recent meetings on 02 December 2017, 03 March 2018, and 02 June 2018 [Exhibit 6]. BLC Instructors (b)(6) and (b)(6) attended the meeting on 03 March 2018 [Exhibit 6, second memo].

(4) The BLC instructors received training on heat and cold weather injury prevention on 21 December 2017 [Exhibit 7] and training on the BLC SOP on 31 January 2018 [Exhibit 8]. Training certificates and rosters indicate that heat and cold weather injury prevention training for relevant BLC instructors was documented except for (b)(6), whose name is missing [Exhibits 7 and 8].

### b. Background on SPC Cayln McLemore.



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(1) SPC Cayln A. McLemore, assigned to the 326<sup>th</sup> Chemical Company, United States Army Reserve, had order number 057033 dated 30 April 2018 to attend BLC at Camp Blanding Joint Training Center, FL [Exhibit 9].

(2) SPC McLemore was enrolled in 3/211 NCOA BN BLC Class 008-18 at CBJTC scheduled to run from 4 June 2018 until 26 June 2018 [Exhibits 1 and 4]. The BLC teaches enlisted Soldiers the basic skills to lead small groups of Soldiers. BLC is "hard hitting and intensive with emphasis on leadership skills and prepares Soldiers to advance to the rank of Sergeant" [Army website at <https://m.goarmy.com/soldier-life/being-a-soldier/ongoing-training/leadership-training/warrior-leader-course.m.html>]. Any Soldier who would like to move up in rank is required to take this course. Most students were SPCs, but six were CPLs and 11 were recently promoted SGTs [Exhibit 4]. SPC Cayln McLemore was in Leadership Class (aka Platoon) number 5 [Exhibit 4]. His Small Group Leaders were (b)(6) and (b)(6) [Exhibit 4]. SPC McLemore was looking forward to attending BLC, according to testimony from his unit (b)(6) [Exhibit 10, second paragraph].

b6  
(b)(6)

(4) Leaders at his USAR unit, the 326<sup>th</sup> Chemical Company, testified that he motivated to do his best, was a "real go getter", and consistently "performed above his pay grade" [Exhibits 10, 12, and 13]. His unit commander, (b)(6), testified that SPC McLemore was always motivated to do his best [Exhibit 12, paragraph 3]. He further stated that SPC McLemore was a hard worker, holding three jobs until recently when he was laid off from one [Exhibit 12, paragraph 4]. His first sergeant, (b)(6), testified that he was dependable and if you gave him a task he always accomplished it [Exhibit 10, paragraph 2]. His first line supervisor, (b)(6), testified that SPC McLemore was dependable and always got the job done without supervision [Exhibit 13, paragraph 3]. Further, he testified that SPC McLemore "liked taking care of people" [Exhibit 13, paragraph 5].

(5) SPC McLemore was doing well in BLC. One of his Small Group Leaders, (b)(6), testified that he was in the running for the Commandant's List status [Exhibit 21, response to question 32]. Another Small Group Leader, (b)(6), testified that academically all of his test scores were in the high 80 percentiles he was on track to graduate from BLC [Exhibit 22, response to question 10].

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(b)(5) and (b)(6)

(7) SPC McLemore was in good health and had no physical ailments or infirmities that might impact his subsequent heat injury.

(b)(6) and (b)(5)

He was coded fully deployable with no limitations [Exhibit 17]. He had no profiles limiting physical activity and had not suffered any previous heat injuries [Exhibit 18].

(b)(5) and (b)(6)

c. Land Navigation Course.

(1) The BLC POI requires passing results on six events during the three week course [Exhibit 1]. As mentioned above, SPC McLemore was passing the BLC, potentially competing for Commandant's List status, and his cumulative class average was in the high 80 percent range [Exhibits 21 and 22]. BLC students automatically are authorized two attempts to pass, and in rare instances may be authorized a third attempt by authority of the Commandant [Exhibit 3, response to question 11]. The USASMA BLC CMP requires students to score at least 75% on the land navigation exam, which means finding correctly 3 of the four assigned points [Exhibit 23].

(2) The S3/S4 Land Navigation Course is a large course due east of CBJTC main post [Exhibit 24]. The Land Navigation Course for BLC met standards for land navigation courses as specified by Paragraph 4-19 of the USASMA BLC CMP, dated 8 February 2017 [Exhibit 25 is an extract from that document]. The standard requires the course to be "self-correcting" in that each designated point provided the grid coordinate for that point, enabling the student to identify their exact location while standing at any point on the course. I personally observed that all of the designated points I viewed had the grid coordinates provided on them. The CMP requires the students to find four points that are from 600 to 800 meters apart, no more or no less. My investigatory



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colleague, BG Faulk, measured the points assigned to SPC McLemore and they all met this criteria [Exhibit 26].

(3) The Land Navigation Course was closed after Hurricane Irma from about August 2017 through March 2018 due to debris and washouts. Following a cleanup effort, the BLC cadre verified each point on the Land Navigation Course [Exhibit 3, response to question 3]. Despite large burned out open areas and clearings [visible in Exhibit 24, an aerial or satellite photograph], the Land Navigation Course appears challenging because of some areas of dense vegetation, numerous fallen trees in some areas, and a creek that runs through part of the course creating muddy areas [based upon personal observations from being on the Land Navigation Course three times soon after the incident being investigated].

(4) According to the course schedule, students received a day of classroom instruction in "Map Reading" on 18 June 2018 [Exhibit 1]. The BLC conducted the Land Navigation Course Practical Exercise on the morning of 19 June 2018 and the Land Navigation Course Exam on the following morning of 20 June 2018 to avoid the afternoon heat in either day [Exhibit 3, response to question 10]. This modification to the course schedule was to enhance safety, for example, "do the outside events in morning with less chance of severe thunderstorms and severe heat issues."

(5) SPC McLemore had some difficulty with the initial Land Navigation Course classroom instruction, but BLC cadre instructor (b)(6) stayed after class to help him with this subject [Exhibit 22, response to question 10]. SPC McLemore was assigned a battle buddy, (b)(6), for the Land Navigation Course Practical Exercise [Exhibit 27, response to question 17]. BLC cadre (b)(6) [Exhibit 28, response to question 7] and (b)(6) [Exhibit 29, response to question 7] confirmed this was routine practice. (b)(6) was assumed by some cadre to be the stronger at land navigation and assigned to help SPC McLemore [Exhibit 27, response to question 21].

(6) SPC McLemore proved to be as effective as (b)(6) during the Land Navigation Course Practical Exercise, and had no trouble identifying three of the four points and earning a passing score [Exhibit 27, response to question 21]. Even though SPC McLemore had passed the BLC Land Navigation Course Practical Exercise requirements early, he was determined to complete the course by finding the fourth point [Exhibit 27, response to final question]. This is consistent with his personality as exhibited during BLC and as described by his mother to Clay County Sheriff's Office (b)(6) [Exhibit 11, page 8]. (b)(6) testified that he and SPC McLemore agreed that "that we would never use dead reckoning if we could avoid it" as a navigation method since terrain association was easier and the vegetation too thick to navigate using dead reckoning [Exhibit 27, response to question 19].



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(7) The BLC Land Navigation Course Exam began on Wednesday, 20 June 2018 at 0758 hours [Exhibit 30, an integrated timeline from multiple sources as noted therein]. The BLC cadre (b)(6) (Exam NCOIC), (b)(6), (serving as Small Group Leader and event medic), (b)(6) and (b)(6) were present on the course [Exhibit 3, response to question 17], with (b)(6), (b)(6) also present later that morning [Exhibit 31, response to question 11; and Exhibit 38, response to question 4]. SPC McLemore was assigned the Land Navigation Course Exam "Green Course 8" route according to his scoresheet, which also contained a list of the course boundaries by name and type of road [Exhibit 32]. A map of key points for the incident indicates SPC McLemore's planned route on the Land Navigation Course [Exhibit 26].

(8) The last persons to see SPC McLemore alive were (b)(6), and (b)(6) probably vicinity MP 09851373 at 0940 to 1015 hours during the conduct of the Land Navigation Course Exam [Exhibit 11, page 4; Exhibit 33, response to question 8; and Exhibit 34]. SPC McLemore stated to these witnesses that he had not found any points yet, was continuing to look for his points, and told one witness he had lost his personal cellphone [Exhibit 11, page 4; Exhibit 33, response to question 8; and Exhibit 34]. A map of this location was prepared, however, in unsworn testimony BLC cadre had thought this encounter more likely happened a few hundred meters to the southwest due to a description of the terrain [Exhibit 35]. The actual location of this encounter is irrelevant for purposes of this investigation, while the information relayed during this encounter is highly relevant. (b)(6) stated that when they left, he thought SPC McLemore was headed to the southeast from their position [Exhibit 34, paragraph 2.d.]. This would have taken him somewhat toward where his remains were eventually found and where his map and scoresheet were eventually found [Exhibit 35].

(9) SPC McLemore lost his CBJTC map and Land Navigation Course Exam scoresheet, vicinity MP 09961258 [Exhibit 36, with associated map, and Exhibit 35 to reference location relative to other locations]. These items were discovered at approximately 1230 hours on Thursday, 22 June 2018 [Exhibit 36]. It is unknown if he lost these items while suffering from heat exhaustion or by accident. (b)(6)

(b)(5) and (b)(6)

d. Risk Management, Heat Injury Prevention, and Hydration.

(1) The BLC used a Deliberate Risk Assessment Worksheet (DRAW) for the entire two week course, with risks highlighted for the class in general or unique to specific training events [Exhibit 37]. The BLC students prepared a DRAW for each day's events and the cadre critiqued them as instruction materials [Exhibit 21, response to question 3]. The BLC DRAW identified the hazards "Hot weather related injuries" on page 1, "Extreme Temperatures" on page 2, and "Dehydration" on page 2 [Exhibit 37].



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(2) The BLC emphasized safety and hydration from the beginning of BLC to include initial orientation and repeated Pre-Combat Inspections and Pre-Combat Checks training [Exhibit 21, response to question 3]. BLC students had to develop a water management plan early in the course themselves, whereby they worked collectively to keep all canteens full on each break [Exhibit 21, response to question 3]. Students also had to take turns conducting a DRAW every day of the course and brief their fellow students on the risks and controls for that block of instruction [Exhibit 21, response to question 3].

(3) The BLC initiated a “hydration plan” on Saturday, 16 June 2018, which was three days before field training began with the Land Navigation Course Practical Exercise on Tuesday, 19 June 2018 and four days before the Land Navigation Course Exam on Wednesday, 20 June 2018 [Exhibit 1, 5 lines from the bottom; and Exhibit 21, response to question 9]. SSG Starling described the hydration plan, which includes reduced caffeinated drink consumption, no energy drinks, and increased Gatorade, juice, and water consumption [Exhibit 28, response to question 9]. SSG Booth described the hydration plan in similar terms [Exhibit 21, response to question 9] as did CSM Ogle [Exhibit 3, response to question 23].

(4) The BLC students were acclimated to high heat and humidity after 16 days at Camp Blanding Joint Training Center prior to the start of the BLC Land Navigation Course Exam [Exhibit 1]. TRADOC Regulation 350-29 states that most Soldiers physiological responses to heat stress improve in 10-14 days of exposure to heat and regular strenuous exercise [Enclosure 5, paragraph 2-1c]. BLC students were on the same terrain at the same time of day with similar weather conditions the day before the Land Navigation Course Exam.

(5) There were no heat injuries among the 76 students participating in the BLC Land Navigation Course Practical Exercise on Tuesday, 19 June 2018, to include SPC McLemore [statement made to this investigator by BLC cadre, (b)(6)]

(b)(6)

(6) BLC cadre had made the decision when planning the Land Navigation Practical Exercise and Exam to diverge from the published Program of Instruction (POI) and conduct both events in the morning when temperatures were cooler, versus conducting both events on the same day [Exhibit 3, response to question 10]. BLC identified high-risk Soldiers by asking BLC students to self-identify if any had prior heat injuries so their Fighting Load Carrier (equipment vest) could be marked with red engineer tape and alert BLC cadre to take special notice. SPC McLemore did not identify that he had any prior heat injuries [Exhibit 18; and Exhibit 21, response to question 11].



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(7) The BLC cadre assumed prior to the Land Navigation Course Exam that Heat Category Index 5 would occur at some point during Wednesday, 20 June 2018, and implemented mitigation measures to include replacing the Army Combat Helmet with a patrol cap, unblousing boots, opening sleeves, and discarding the green t-shirt under the OCP/ACU blouse [Exhibit 3, response to question 23; and Exhibit 21, response to question 11]. BLC students were free to use these measures at their own discretion.

(8) There was only one heat injury among the 76 students participating in the Land Navigation Course Exam on Tuesday, 20 June 2018 [statement made to this investigator by BLC cadre, however, although it is in my notes I cannot find it in a sworn statement]. If true, the only heat injury was SPC McLemore. TRADOC Regulation 350-29 states that leaders should reevaluate the training mission if two or more heat illnesses occur at a given training site on the same day [Enclosure 5, paragraph 1-3.f.(15)]. This threshold of two heat illnesses was not reached.

(9) (b)(6) conducted the safety briefing for the Land Navigation Course Exam on 20 June 2018 at or about 0732 hours [Exhibit 28, response to question 13; and Exhibit 30]. Multiple BLC cadre and student testimony confirms this event occurred. The safety briefing used a standardized format and was laminated for routine use [Exhibit 39]. Safety measures initiated that day by BLC cadre included the wearing of an orange reflective belt by students, the issuance of a whistle, and instructions that if lost to shoot a panic azimuth of 180 degrees due South, or failing that, to head in any direction until a "hardball" road was reached and then sit and wait for a search vehicle driving a circuit around the Land Navigation Course to pick them up [Exhibit 39]. When found, SPC McLemore had his orange reflective PT belt in his pants cargo pocket, his whistle was functional and on his person, and he was approximately 150 meters from Britt Place Road [Exhibit 11, page 10-11; and this investigator personally tested the whistle].

(10) BLC cadre instituted an additional safety measure by authorizing BLC students to carry their personal cell phone in a clear plastic bag to use in emergencies [Exhibit 3, response to question 13]. Additionally, BLC cadre maintained a list of all student phone numbers to call in case of emergency [Exhibit 3, response to question 13; and Exhibit 33, response to question 5]. This is not a standard practice among BLC courses, and was identified as an RTI-FL "best practice" during an accreditation inspection in March 2018. SPC McLemore had his personal cell phone on him at the start of the BLC Land Navigation Course Exam at 0758 hours, but lost it at some point prior to 0940 to 1030 hours [Exhibit 11, page 4, relaying what BLC student (b)(6) stated, later collected as sworn testimony in Exhibit 33, response to question 8]. SPC McLemore's personal cell phone is apparently still on the course.



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e. Water.

(1) SPC McLemore was issued two canteens, two canteen carriers, and a camelback according to his Army Clothing Record and BLC Packing List [Exhibit 40]. SPC McLemore and two members of his chain of command indicated he had all five hydration items prior to attendance at the course using the BLC Packing List [Exhibit 41]. SPC McLemore left one camelback in his billet the day of the BLC Land Navigation Course Exam, and no canteens were found in his billet after he went missing [Exhibit 42, page 2]. SPC McLemore was signed for two canteen carriers according to his Army clothing record (Exhibit 40). These were apparently attached to his load bearing vest returned by the Clay County Sheriff to RTI-FL [Exhibit 43, page 3, item 1]. The two canteen carriers were turned into CIF [Exhibit 44]; two canteens and a camelback were not turned in [Exhibit 44].

(2) The BLC Land Navigation Course Safety Brief specified that each Soldier have "a full water source", without specifying how much water should be on each Soldier to begin the course [Exhibit 39]. SPC McLemore had at least one 1-quart canteen of water on his person at the start of the course, and may have had two canteens on his person (b)(5) and (b)(6). SPC McLemore's water supply was likely checked at least three times prior to the start of the course: by himself as his own student squad leader [Exhibit 27, response to question 11, "we were required to carry one canteen or camelback"], by his student First Sergeant (b)(6) [Exhibit 46, response to question 3], and by his Small Group Instructor (b)(6) [Exhibit 21, response to question 4]. SPC McLemore was not only responsible for his own water supply, but for the water supply of his squad members too.

(3) Besides individually carried water in canteens or camelbacks, potable water was available at three locations on the BLC Land Navigation Course Exam: at the Rally Point, intersection of Tower Road and Wolf Branch Road, and intersection of Tower Road and Dade Road [Exhibit 26, with water points noted as blue triangles]. The closest water point was 0.68 miles and the farthest water point was exactly one mile from where his remains were found, which this investigating officer calculated using a 1:50,000 Camp Blanding Military Installation Map and a protractor.

(4) TRADOC Regulation 350-29 states that cadre should "ensure water control points throughout designated training areas" [Enclosure 5, paragraph B-1.c.(4)(b)] and that they should "place water at key points, e.g., at land navigation training area objectives" [Enclosure 5, paragraph B-1.d.(1)(b)]. Because this was not accomplished, BLC students would have to take time out from the Land Navigation Course Exam in order to resupply their camelback or canteens. As an example, where SPC McLemore was found, it was 0.68 miles to the nearest water point overland, or more by road, and

(b)(5) and (b)(6)



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(b)(5) and (b)(6)

(5) SPC McLemore's remains were found with one 1-quart canteen near his person [Exhibit 47, page 1]. This 1-quart canteen was identified by Detective (b)(6) but left on scene until discovered by this investigator on 11 July 2018 [Exhibit 48, enclosure page 4]. This canteen was found obscured by brush not more than 2 feet from SPC McLemore's remains, was tightly sealed, and still contained 1 to 2 ounces of apparently potable water [Exhibit 48, enclosure page 4]. If a second 1-quart canteen exists, it is still on the course. It was likely that up to 6" deep puddles of non-potable water were located within 20 feet of his remains [Exhibit 48, enclosure page 3]. This and the existence of water in SPC McLemore's recovered canteen indicate that he either did not know he was suffering from heat exhaustion or was disoriented from its effects.

f. Wet Bulb Globe Temperature (WBGT).

(1) No WBGT readings were made on Camp Blanding Joint Training Center on Wednesday, 20 June 2018, to include CBJTC Operations, CBJTC Range Control, CBJTC Public Works, CBJTC Environment and Forestry, RTI-FL, BLC, or the tenant ANG Weather Flight [based upon numerous personal interviews, e-mail queries, and telephone conversations with each of these organizations or their supervisors in a desperate attempt to find some WBGT readings at CBJTC on 20 June 2018].

(2) The BLC followed TRADOC Regulation 350-29 for heat injury prevention, particularly Appendix B, with exception that WBGT readings were not taken in accordance with Paragraph B-1.a.(1) [Enclosure 5]. In mitigation, the RTI-FL BLC assumed the worst Heat Category Index of 5 and modified the uniform accordingly, thereby making actual WBGT determination moot [Exhibit 3, response to question 23; Exhibit 21, response to question 9; and Exhibit 31, response to question 6].

(3) The closest National Weather Service (NWS) monitoring station is at Keystone Airpark, located approximately 9.25 miles from the BLC Land Navigation Course Rally Point [calculated by this investigator using a 1:50,000 scale military map and a protractor]. This weather monitoring station does not record WBGT [Exhibit 49]. This weather monitoring station recorded 10 weather variables on Wednesday, 20 June 2018 for every 20 minutes throughout the day [Exhibit 49]. The National Weather Service has a prototype calculator to determine WBGT using eight of the variables they collect at weather monitoring stations: month, day, latitude, maximum temperature, dew point, radiant heat, wind speed, and cloud cover [see NWS website at [www.weather.gov/tsa/wbgt](http://www.weather.gov/tsa/wbgt)].

(4) Using these NWS variables and the NWS WBGT calculator coupled with a worst case variable of zero cloud cover, at no point between 0800 hours and 1115



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hours was the temperature Heat Category Index 5 [Exhibit 50]. The highest reading was a high end of Heat Category Index 3 at a WBGT temperature of 87 degrees Fahrenheit (Heat Index 103 degrees) between 0955 hours and 1115 hours [Exhibit 50]. By 1135 hours the temperature reached Heat Category Index 4 with a WBGT of 88 degrees (Heat Index 107 degrees), after cooling to Heat Category Index w with a WBGT of 87 degrees by 1315 hours [Exhibit 50].

g. Search and Rescue Effort.

(1) At approximately 1105 hours on 20 June 2018, with eight minutes to go until the end of the proscribed time for the Land Navigation Course Exam at 1113 hours, (b)(6) began driving the perimeter roads searching for the four lost students [Exhibit 38, response to question 4]. As Land Navigation Course NCOIC, (b)(6) had been tracking the return of the BLC students and was aware that there were four missing students, including SPC McLemore [Exhibit 31, response to question 7]. (b)(6) began driving the perimeter roads as well [Exhibit 21, response to question 15]. (b)(6) dispatched cadre on foot onto the course to locate missing students [Exhibit 31, response to question 7]. This is standard practice according to (b)(6) [Exhibit 3, response to question 21]. (b)(6) and two BLC students went out on foot looking for the missing Soldiers [Exhibit 36, at 1058 hours].

(2) After returning from lunch to get the BLC students energy and water, (b)(6) arrived with the students at 1310 hours on 20 June 2018 [Exhibit 31, response to question 7]. The BLC cadre timely organized a search using 3 cadre and approximately 73 of the 76 BLC students to search an area approximately the size of two square kilometers over a 2.5 hour time span [based upon a review of Exhibits 30 and 51]. (b)(6) had the BLC cadre and students form a line running north to south along Tower Road, from Dade Road in the south to just slightly north of the start point, with spacing between 25 and 50 meters between students depending on vegetation [Exhibit 3, response to question 21; Exhibit 31, response to question 7; and Exhibit 51].

(3) Students moved on line across training area 4 with (b)(6) and (b)(6) managing progress and keeping students on line [Exhibit 3, response to question 21]. The line of BLC cadre and students started moving at or about 1400 hours according to SSG McCook [Exhibit 36, at 1400 hours]. The line of searchers paused every few minutes for rest and hydration break, or if someone thought they heard something and needed to listen for SPC McLemore [Exhibit 31, response to question 7]. This activity ended at approximately 1535 hours when the line of students reached the road, and the cadre gathered them at the intersection of Britt Place and Cemetery Road [Exhibit 3, response to question 21]. The students were exhausted from the day's events and the BLC cadre made the determination to pull them from the field [Exhibit 7, response to question 21]. SPC McLemore's remains were ultimately found two days later in the area searched [Exhibits 35 and 51].



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(4) At approximately 1348 hours on 20 June 2018, (b)(6) requested Range Control to coordinate air support [Exhibit 3, response to question 21; and Exhibit 30]. One HH-60M Blackhawk helicopter piloted by (b)(6) arrived on station at Landing Zone 120 at approximately 1459 hours, picks up (b)(6) and began searching from 1509 hours through 1535 hours [Exhibit 38, response to question 5]. Pilot (b)(6) flew the HH-60M helicopter in a low altitude sweep between 300 to 500 foot altitude flight along Britt Place Road, first using north and south patterns, about 50 meters apart, then east and south patterns, with no success [Exhibit 52, responses to questions 2, 4, 6, and 12]. (b)(6) estimates he passed over that area probably 20 times in total [Exhibit 52, response to question 6]. The search lasted between 35 and 90 minutes before a thunderstorm forced the aircraft to divert for flight safety reasons; Range Control logs favor the former while (b)(6) favors the later [Exhibit 30; and Exhibit 52, response to question 13]. This investigator favors Range Control data based upon the NWS data which indicates wind picking up significantly between 1515 hours and 1535 hours [Exhibit 49]. Regardless, (b)(6) dropped (b)(6) off at Landing Zone 120 and the BLC Cadre agreed to meet at Range Control to wait out the thunderstorm and decide what to do next [Exhibit 38, response to question 7]. The HH-60M diverted to Gainesville to wait out the storm [Exhibit 53].

(5) The thunderstorm began between 1515 hours and 1535 hours and ended between 1855 hours and 1915 hours, with the most violent wind and rain occurring within the first 20 to 40 minutes followed by a few hours of drizzle [Exhibit 49]. Total rainfall for this storm event was likely close to 1.22" of cold rain which lowered the temperature by 17 degrees Fahrenheit [Exhibit 49]. This cold rain likely cooled SPC McLemore's remains and making it difficult to spot him later that evening using FLIR technology.

(6) The CCSO was notified of the missing Soldier sometime in the early afternoon, deputies arrived at CBJTC Range Control at 1620 hours, and deputies were on scene at the Land Navigation Course by 1730 hours on Wednesday, 20 June 2018 [Exhibit 30]. The CCSO did not "take over" the search, but based on subsequent testimony they did assume de facto incident command for the search and rescue operations [Exhibit 38, response to question 7].

(7) A second ground search using conducted on Wednesday, 20 June 2018 after the thunderstorm passed [Exhibit 38, response to question 7]. BLC cadre placed lights and observers on the Land Navigation Course overnight to give SPC McLemore something to see and be guided to if he was still on the course [Exhibit 3, response to question 21; Exhibit 36, at 1945 hours; and Exhibit 38, response to question 7]. SPC McLemore's remains were ultimately found two days later in the area searched.

(8) The HH-60M returned to CBJTC after the thunderstorm passed to continue to search for SPC McLemore [Exhibit 53]. A second helicopter, a UH-72 Lakota piloted



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by (b)(6), left Cecil Field to join the search and rescue effort at or about 1730 hours [Exhibit 53; and Exhibit 54, response to question 10]. (b)(6) estimates he flew over the area where SPC McLemore was found perhaps 30 times, with the total time within about 1 kilometer of where SPC McLemore's remains were ultimately found being approximately 2 hours on 20 June 2018 and 4 hours on 21 June 2018 [Exhibit 54, response to question 2]. See the map of the initial aerial search and rescue effort by the UH-72A Lakota helicopter [Exhibit 55].

(9) The UH-72 Lakota's FLIR capability is described as being better than that of the HH-60M Blackhawk's [Exhibit 52, response to question 9; and Exhibit 54, response to question 12 for a primer on FLIR capabilities]. The HH-60M Blackhawk's FLIR was operated by the copilot and supplemented by other passengers acting as outside observers [Exhibit 52, response to question 9]. Foliage will tend to make it difficult to identify a person on FLIR since there has to be some temperature difference between the foliage and the person or object for it to show as different to an observer [Exhibit 54, response to question 12]. Wet foliage will mask infrared energy emitting sources such as the human body even better than dry foliage [Exhibit 52, response to question 11; Exhibit 54, response to question 4]. However, the FLIR has remarkable acuity, for example, FLIR operators were able to distinguish wildlife from surrounding foliage, including deer wiggling its ears Exhibit 54, response to question 4].

(10) The Florida Highway Patrol assigned Patrol Trooper (b)(6) to assist with the search flying a Cessna 206 with MX-10 FLIR system from 2230 hours through 0130 hours on 20-21 June 2018 [Exhibit 56, paragraph 2]. He and his copilot, Tactical Flight Officer Trooper (b)(6), had extensive experience in aerial observation and have conducted SAR operations prior to this incident [Exhibit 56, paragraph 2]. He said they "had exceptional visibility with the FLIR that night" during the 3 hours they spent flying over CBJTC [Exhibit 56, paragraph 3]. They could clearly identify deer, hogs, and even animals as small as rabbits, but saw no people in the search zone [Exhibit 56, paragraph 3]. He stated that the FLIR will generally not see through foliage but that heat sources will show as you fly around objects [Exhibit 56, paragraph 5]. Patrol Trooper (b)(6) thought that it was likely they would have seen SPC McLemore if he was still a heat source [Exhibit 56, paragraph 5].

(11) CBJTC expanded the search and rescue effort dramatically on 21 June 2018, by assembling numerous personnel to assist [Exhibit 3, response to question 21; and Exhibit 30]. Starting at 0630 hours, over 100 volunteers from Soldiers at CBJTC for training or meetings reported to the RTI-FL parking lot to assist and search in groups of ten or so personnel with an NCO from the RTI-FL embedded in each group due to familiarity with the land navigation course [Exhibit 3, response to question 21; Exhibit 30; and Exhibit 57]. The groups moved from west to east in the same location as the previous day's search and were spaced about 5 meters apart [Exhibit 57]. According to (b)(6) from the 164 ADA BDE, the brush was thick and impassable in some areas, and there were numerous heat casualties in the time between 0830 hours and



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1230 hours [Exhibit 57]. Other testimony indicates that there were closer to 250 personnel involved in the search and rescue effort later that day [Exhibit 38, the third paragraph in the response to question 7]. A review of the CCSO Timeline for the Event, which included the names of searchers, indicates that the first search began at 0700 hours in the morning and utilized 18 teams with 187 Soldiers, CBJTC civilian employees, and law enforcement officers [Exhibit 58]. The second search began at 1400 hours in the afternoon and used 7 teams with 114 Soldiers and law enforcement officers [Exhibit 58]. As a reminder, SPC McLemore's remains were ultimately found on the next day in the area searched. (b)(6) also indicated that the numerous heat casualties were hurting more than helping on 21 June 2018 [Exhibit 3, response to question 21].

(12) SPC McLemore's scoresheet and map were found, with some evidence of boot prints, by a ground search team on 21 June 2018 at about 1218 hours [Exhibit 38, the fourth paragraph in response to question 7; Exhibit 30, at 1218 hours]. A blurred photograph was taken by (b)(6) [Exhibit 59]. This understandably intensified the search [Exhibit 36]. These items were never recovered by this investigator. (b)(6)

(b)(5) and (b)(6)

(13) The search and rescue effort on Friday, 22 June 2018 involved in excess of 400 searchers from numerous organizations throughout North and Central Florida. SPC McLemore's remains were ultimately found later that day in the area searched [Exhibit 3, response to question 21]. Additional aircraft were also being coordinated for later that night [Exhibit 56, paragraph 6].

#### h. Cause and Time of Death.

(1) SPC McLemore's remains were found by CBRNE Enhanced Response Force Package (CERFP) Search Team 1 member SrA (b)(6) on Friday, 22 June 2018 at 1755 hours, vicinity MP 09951285 [Exhibit 11, page 10; and Exhibit 48]. SrA (b)(6) examined SPC McLemore for life signs and finding none, the team cordoned off the area pending arrival of the police [Exhibit 11, page 10; and Exhibit 48]. SPC McLemore's remains had been exposed to the elements for approximately two full days based upon decomposition and insect activity [Exhibit 11, page 11].

(2) On arrival to the scene, Detective (b)(6) recorded the exact location of SPC McLemore's remains to be Latitude 29.9429 North and Longitude -81.9335 West (vicinity MP 09951285) [Exhibit 11, page 11]. SPC McLemore was found approximately 150 meters from Britt Place Road [based upon this investigator using a 1:50,000 scale



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military map and protractor to determine distance]. Detective (b)(6) observed that SPC McLemore was “found lying next to a tree face down” with the “victim’s carrier vest ... located to the left of the body about 10 feet away” [Exhibit 11, page 11]. He further noted that the remains were decayed and appeared exposed to the elements for about 2 full days [Exhibit 11, page 11]. He further noted that it appeared that SPC McLemore “did not die as a result of foul play” [Exhibit 11, page 11]. SPC McLemore had his orange reflective PT belt in his pants cargo pocket, his whistle was functional and on his person [Exhibit 11, page 11]. A slight discrepancy exists when comparing the testimony of Detective (b)(6) [Exhibit 11] with that of (b)(6) [Exhibit 48], in that the former testifies that SPC McLemore’s remains were discovered face down while the latter testifies that he was face-up. Although irrelevant, it is highly likely that Detective (b)(6) rolled the remains over upon arrival at the scene. This was confirmed with (b)(6) a telephone conversation (b)(6).

(3) SPC McLemore’s remains were transported to the District 4 Medical Examiner’s Office (erroneously referred to as the Clay County Coroner’s Office by many parties interviewed), where an autopsy was conducted on 23 June 2018 by the Medical Examiner (b)(6) and observed by CCSO (b)(6) [Exhibit 11, page 11; Exhibits 61 and 62]. Florida National Guard Surgeon (b)(6) also observed the remains first hand at some point [Exhibits 63 and 64]. (b)(6) autopsy report determined the death of SPC McLemore to be accidental and caused by environmental heat exposure [Exhibit 62, page 4]. Environmental heat exposure is the same as hyperthermia, also known colloquially as heat stroke. Hyperthermia is the opposite of the more commonly understood term hypothermia, or acute cooling. Hyperthermia is elevated body temperature due to failed thermoregulation that occurs when a body produces or absorbs more heat than it dissipates. Hyperthermia may require immediate medical intervention to avoid death or disability [based upon numerous medical website explanations researched so that this investigator could better understand cause of death].

(4) The report found no evidence of ante-mortem (pre-death) trauma and the toxicology report was negative with exception of routine amount of ethanol commonly found in the body as a result of decomposition [Exhibit 62, page 5]. In an interview before the official release of the Medical Examiner’s Report, (b)(6) testified that there was no physical trauma nor evidence of snake bite or animal attack [Exhibit 61]. She further noted that the remains of SPC McLemore demonstrated normal decomposition commensurate with the length of exposure [Exhibit 61].

(b)(6)  
The Clay County Sheriff’s Office closed the case as an accidental death [Exhibit 11, page 12].



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(5) Fatalities due to hyperthermia are extremely uncommon on land navigation courses, with only two fatalities reported in the entire United States Army from 1 October 2007 through 12 July 2018, and one of those two fatalities was SPC McLemore [Exhibit 66, page 10]. The only other hyperthermia fatality on a land navigation course during this time period was an ROTC CDT who passed away in 2011 [Exhibit 66, page 10]. During this same period, there were only 3 cases of heat stroke and 79 cases of heat exhaustion reported on any land navigation course Army-wide [Exhibit 66].

i. Aftermath. According to media reports, SPC McLemore's remains were shipped home for a funeral held Saturday, 30 June 2018 in Memphis, Tennessee at New Bethel Missionary Baptist Church [see website <https://wreg.com/2018/06/30/memphis-soldier-who-died-during-training-exercise-laid-to-rest/laid-to-rest/laid-to-rest/>]. SPC McLemore's funeral included full military honors [see website <https://www.commercialappeal.com/picture-gallery/news/2018/06/30/army-reserve-specialist-cayln-mclemore-laid-to-rest/36526509/>]. The BLC has requested and received an exception to policy to forego the Land Navigation Course Practical Exercise and Exam for remaining courses under the current Program of Instruction [post-investigation discussion with BLC cadre]. The new BLC CMP to be implemented no later than December 2018 does not include land navigation instruction, perhaps making future safety measures for this particular course moot [see previous source].

6. Findings. After considering the evidence, I find that:

a. SPC McLemore lapsed into unconsciousness vicinity MP 09951285 due to acute hyperthermia in the early afternoon of 20 June 2018, between 1100 hours and 1400 hours, and likely closer to 1100 hours [based upon numerous Exhibits in paragraphs g.(3), g.(7), h.(1), and h.(2)]. Because he was unconscious, he did not respond to the initial searchers on foot and perimeter roads who were very near his location and shouting his name at approximately 1400-1500 hours [see Exhibits cited in paragraphs g.(3) and g.(7)]. He never called out or blew his whistle so that searchers might hear him and come to his aid [see previous comment]. Because he was unconscious, he also was not able to move to the road where he could be more readily identified [see paragraph h.(2); SPC McLemore was only 150 meters from the road and almost certain discovery].

b. SPC McLemore passed away from acute hyperthermia, also known as heat stroke, later in the afternoon of 20 June 2018 and either prior to or concurrent with the "monsoon like" thunderstorm that swept the area starting no later than 1540 hours [see Exhibit 49 and compare to search activities and supporting Exhibits to paragraphs g.(3) and g.(7)]. He had been deceased for approximately two days when his remains were discovered on 22 June 2018 [Exhibit 11, page 11]. SPC McLemore likely did not suffer in passing since he was unconscious [based upon inferences made from the evidence above].



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c. SPC McLemore's body was cooled by the thunderstorm's cold rain, which lowered the temperature by 17 degrees Fahrenheit [see Exhibit 49 and compare to search activities and supporting Exhibits to paragraphs g.(3) and g.(7). This cold rain sufficiently cooled his body to match the ambient temperature of his surroundings [see previous comment]. This explains why three different FLIR systems were unsuccessful in finding him later that evening or subsequent FLIR searches were unsuccessful the next evening [see Exhibits cited in paragraph g.(9)]. The UH-72A Lakota pilot, (b)(6) explained that if a body had cooled to the temperature of the surrounding area, it would have been extremely difficult to see anything distinct from the woods and the foliage [see previous comment].

d. The BLC adequately taught map reading and land navigation, and provided extra help when needed. The BLC passed their portion of a TRADOC Accreditation Inspection on March 2018 [Exhibit 2]. When SPC McLemore had some difficulty with the Land Navigation Course classroom instruction, a BLC instructor stayed after class to assist him and he was assigned a battle buddy more proficient at this task [Exhibits 21 and 22]. SPC McLemore ultimately proved to be at least equal and perhaps superior to his battle buddy during the Land Navigation Course Practical Exercise, and had no trouble identifying three of the four points and earning a passing score [Exhibit 27]. However, the next day he had not identified any of his four points between 1 hour, 40 minutes (b)(6) and 2 hours, 30 minutes (b)(6) into the Land Navigation Course Exam [Exhibits 33 and 34].

(b)(6)

e. The BLC sufficiently emphasized hydration. This emphasis included initial orientation, repeated Pre-Combat Inspections and Pre-Combat Checks training, and the student requirement to develop a water management plan early in the course, whereby the worked collectively to keep all canteens full on each break [Exhibits 21]. The BLC initiated a "hydration plan" on Saturday, 16 June 2018, which was three days before field training began with the Land Navigation Course Practical Exercise on Tuesday, 19 June 2018 and four days before the Land Navigation Course Exam on Wednesday, 20 June 2018 [Exhibit 1]. The hydration plan includes reduced caffeinated drink consumption, no energy drinks, and increased Gatorade, juice, and water consumption [Exhibit 21]. SPC McLemore had at least one 1-quart canteen of water on his person at the start of the course, and may have had two 1-quart canteens on his person [numerous Exhibits and testimony, but particularly based upon Exhibits 40-41, and 42]. SPC McLemore's water supply was explicitly checked at least three times prior to the start of the course, by himself as student squad leader, by his student First Sergeant (b)(6) and by his Small Group Instructor (b)(6) [see Exhibits cited in paragraph e.(2)]. SPC McLemore was not only responsible for his own water supply, but for the water supply of his squad members too.



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f. The BLC students were adequately acclimated to the high heat and humidity of CBJTC prior to the start of the Land Navigation Course Exam. The Land Navigation Course Exam occurred after the students had spent 16 days at Camp Blanding Joint Training Center prior to the start of the BLC Land Navigation Course Exam [Exhibit 1]. TRADOC Regulation 350-29 states that most Soldiers physiological responses to heat stress improve in 10-14 days of exposure to heat and regular strenuous exercise [paragraph 2-1c]. The BLC students were on the same terrain at the same time of day with similar weather conditions the day before the Land Navigation Course Exam, and knew what to expect. There were no heat injuries among the 76 students participating in the BLC Land Navigation Course Practical Exercise on Tuesday, 19 June 2018, to include SPC McLemore [verbal testimony]. There was only one heat injury among the 76 students participating in the BLC Land Navigation Course Exam on Tuesday, 20 June 2018, this was SPC McLemore [verbal testimony, although there was substantial testimony that there were numerous heat injuries the next day, 21 June 2018, during the search and rescue effort]. TRADOC Regulation 350-29 states that leaders should reevaluate the training mission if two or more heat illnesses occur at a given training site on the same day [paragraph 1-3.f.(15)]. This threshold of two heat illnesses was not reached.

g. The BLC had in place adequate safety measures for the Land Navigation Course Exam. The BLC cadre had made the decision when planning the Land Navigation Practical Exercise and Exam to diverge from the published Program of Instruction (POI) and conduct both events in the morning when temperatures were cooler, versus conducting both events on the same day [Exhibit 3, and others]. The BLC identified high-risk Soldiers by asking the BLC students to self-identify if any had prior heat injuries so their Fighting Load Carrier (equipment vest) could be marked with red engineer tape and alert the BLC cadre to take special notice [Exhibit 21]. SPC McLemore did not identify that he had any prior heat injuries [Exhibit 18]. During the day of the Land Navigation Course Exam, safety measures implemented included the wearing of an orange reflective PT belt by students, the issuance of a whistle, the authorization for students to carry their personal cell phone in a clear plastic bag to use in emergencies, and instructions that if lost to shoot a "panic azimuth" of 180 degrees due South, or failing that, to head in any direction until a "hardball" road was reached and then sit and wait for a search vehicle driving a circuit around the Land Navigation Course to pick them up [Exhibit 21, among others]. The BLC students were uniformly aware of these safety measures during investigation interviews [numerous BLC students interviewed agree with this statement, for example, see Exhibit 15, response to question 10; Exhibit 16, response to question 9; Exhibit 27, response to question 9]. When found, SPC McLemore had his orange reflective PT belt in his pants cargo pocket, his whistle was functional and on his person, he was approximately 150 meters from Britt Place Road, and he had lost his personal cell phone [Exhibit 11, page 11].

h. The BLC generally followed TRADOC Regulation 350-29, specifically Appendix B, Heat Illness Risk Management and Casualty Identification and Treatment, with the



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only exception was that WBGT readings were not taken [paragraph B-1.a.(1)]. In mitigation, the BLC assumed prior to the Land Navigation Course Exam that Heat Category Index 5 would occur at some point during 20 June 2018, making the use of WBGT moot [Exhibit 3]. The BLC implemented mitigation measures to include replacing the Army Combat Helmet with a patrol cap, unblousing boots, opening sleeves, and discarding the green t-shirt under the OCP/ACU blouse [Exhibits 3, 21, and 22 for example]. The BLC students were free to use these measures at their own discretion, as long as "we don't look ridiculous" [Exhibit 22, response to question 6].

i. The BLC risk assessment controls for the Land Navigation Course should specify the amount of water necessary for field training events. The BLC risk assessment controls only specified that each Soldier "ensure water", without specifying how much water should be on each Soldier to begin the course [Exhibit 37]. Some BLC cadre thought this meant two 1-quart canteens, while others thought it meant at least one 1-quart canteen [various BLC cadre statements, to include Exhibit 21 (1 canteen) or Exhibits 3, 28, and 29 (2 canteens)]. IN hindsight, the BLC risk assessment controls could have identified additional water control points [perhaps five instead of three]. TRADOC Regulation 350-29 states "Ensure water control points throughout designated training areas" and B-1.d.(1)(b) states "Place water at key points, e.g., at land navigation training area objectives" Enclosure 5, paragraph B-1.c.(4)(b)]. Besides individually carried water in canteens or camelbacks, potable water was available at three locations on the BLC Land Navigation Course Exam: at the Rally Point, intersection of Tower Road and Wolf Branch Road, and intersection of Tower Road and Dade Road [Exhibit 24]. Because additional water control points were not established, BLC students would have to take time out from the Land Navigation Course Exam in order to resupply their camelback or canteens. As an example, where SPC McLemore was found, it was 0.68 miles to the nearest water point overland, or more by road, and water re-supply would have reduced his effective time to complete the Land Navigation Course Exam [measured by this investigator using a 1:50,000 scale military map and protractor]. SPC McLemore's demonstrated determination to complete a task once started means he might have pressed on to complete the course rather than resupply water [see Exhibits and discussion in paragraph c.(6)].

j. Lack of water was not the cause-in-fact of SPC McLemore's death, but merely a contributing factor. Cause of death was environmental heat exposure, otherwise known as acute hyperthermia [Exhibit 62]. The level of his dehydration could not specifically be tested due to the condition of the remains after being exposed to the environment for two days [Exhibits 63 and 64]. Consuming water or evaporating it on the skin is one way to cool down, but other methods including grounding equipment, moving to the shade, and stopping activity. SPC McLemore had likely attempted all three of these steps. His ACU blouse and FLC were found neatly draped over a nearby log, he was found partially in the shade, and had apparently stopped moving and was lying down [Exhibit 11, page 11; and Exhibit 48]. SPC McLemore's remains were found with one 1-quart canteen near his person [Exhibit 11]. This 1-quart canteen was identified by



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Detective [REDACTED], but left on scene until discovered by this investigator on 11 July 2018 [Exhibit 48]. This canteen was found obscured by brush not more than 2 feet from SPC McLemore's remains, was tightly sealed, and still contained 1 to 2 ounces of water [Exhibit 48]. This is water he did not drink even though he was overheated. It was likely that up to 6" deep puddles of non-potable water were located within 20 feet of his remains [Exhibit 48]. This and the existence of water in SPC McLemore's recovered canteen indicate that he either did not know he was suffering from heat exhaustion or was disoriented from its effects.

k. The BLC cadre instituted extremely timely and highly organized search measures to locate SPC McLemore once the allotted time for the Land Navigation Course Exam expired [see Exhibits associated with paragraph g.(1)]. The BLC cadre timely organized a search using 3 cadre and 73 of the 76 BLC students to search an area approximately the size of two square kilometers over a 2.5 hour time span [see Exhibits associated with paragraphs g.(2) and g.(3)]. They were searching in the correct location, because SPC McLemore's remains were ultimately found two days later in the area searched [Exhibits 26 and 35]. The RTI-FL, CBJTC, and local law enforcement rapidly and appropriately escalated their search efforts once initial search effort proved unsuccessful [see discussion from multiple paragraphs in section g.] The CCSO was notified of the missing Soldier sometime in the early afternoon, deputies arrived at CBJTC Range Control at 1620 hours, and deputies were on scene quickly [Exhibit 30]. A second ground search using conducted on Wednesday, 20 June 2018 after the thunderstorm passed [Exhibit 30]. SPC McLemore's remains were ultimately found two days later in the area searched. Three separate FLIR systems and aircraft visual observers failed to identify SPC McLemore's remains the afternoon, evening, and early morning of 20-21 June 2018 [see Exhibits associated with paragraphs g.(4), g.(9), and g.(10)]. Subsequent air searches were conducted later on 21 June and again on 22 June 2018, also without success [Exhibit 53]. SPC McLemore's remains were ultimately found two days later in the area searched. CBJTC organized two ground searches on Thursday, 21 June 2018 [see Exhibits associated with paragraph g.(11)]. The first search began at 0700 hours in the morning and utilized 18 teams with 187 Soldiers, CBJTC civilian employees, and law enforcement officers [see previous comment]. The second search began at 1400 hours in the afternoon and used 7 teams with 114 Soldiers and law enforcement officers [see previous comment]. SPC McLemore's remains were ultimately found on the next day in the area searched. The search and rescue effort on Friday, 22 June 2018 involved in excess of 400 searchers from numerous organizations throughout North and Central Florida [Exhibit 3, response to question 21; and Exhibit 58]. SPC McLemore's remains were ultimately found later that day in the area searched.

l. The Heat Category Index was likely 3 for the Land Navigation Course Exam and likely never exceeded Heat Category Index 4 later that day as cloud cover and an afternoon thunderstorm cooled temperatures and shaded direct sunlight [Exhibits 49 and 50 used in conjunction]. No Wet Bulb Globe Temperature (WBGT) readings were



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made on Camp Blanding Joint Training Center on Wednesday, 20 June 2018, to include CBJTC Operations, CBJTC Range Control, CBJTC Public Works, CBJTC Environment and Forestry, RTI-FL, BLC, or the tenant ANG Weather Flight. This proved not to be a factor in this incident because: (1) BLC cadre assumed Heat Category Index 5 would be reached [Exhibit 3, response to question 23; Exhibit 21, response to question 9; and Exhibit 31, response to question 6]; and (2) actual extreme physiological effects were not felt since the actual Heat Category Index likely never exceeded 3 during the Land Navigation Course [Exhibit 50].

m. There were a few minor discrepancies found in various Exhibits. First, CCSO Detective [REDACTED] reported that [REDACTED] claimed to meet SPC McLemore on the Land Navigation Course Exam [Exhibit 11]. The testimony of [REDACTED] indicates that she was at the Rally Point the entire time during the Land Navigation Course Exam [Exhibit 21]. A follow-up conversation with her confirms this. Since she was the medic, she had to stay at the Rally Point. I believe it is highly likely that Detective [REDACTED] conflated the testimony of [REDACTED] and [REDACTED] who were interviewed at about the same time, and the latter did see SPC McLemore on the course. Additionally, Detective [REDACTED] testified that [REDACTED] testified that SPC McLemore had a prior heat injury [Exhibit 11]. [REDACTED] denies this in a sworn statement [Exhibit 67]. I believe it is highly likely that Detective [REDACTED] confused [REDACTED] remarks of how the BLC cadre identifies prior heat injuries to say that the BLC cadre did identify a prior heat injury. Other minor discrepancies about the first search flight duration of the HH-60M on 20 June 2018 [paragraph g.(4)] and whether SPC McLemore's remains when discovered were face up or face down [paragraph h.(2)] are irrelevant to this inquiry. This investigator considers these minor discrepancies resolved as indicated.

n. Based upon the aforementioned findings, this investigator does not substantiate any culpability on the part of CBJTC, RTI-FL, or the BLC leadership and/or cadre. RTI-FL Commandant [REDACTED], BLC Course Manager [REDACTED], Land Navigation Course NCOIC [REDACTED], and Small Group Leaders [REDACTED] and [REDACTED] provided effective leadership and stewardship over the BLC students in their charge. The vast majority of risk management measures identified and controls implemented were appropriate and effective, including some innovative "best practices." Minor concerns about location of water points are far outweighed by daily, consistent, and rigorous instruction on the importance of hydration and heat injury prevention. In effect, all BLC students were charged from the beginning of the course to monitor the water of themselves and their battle buddies. Like the old Army adage, everyone was a safety officer." Once SPC McLemore was missing, the BLC responded timely and effectively escalated their efforts almost immediately after SPC McLemore went missing. CBJTC responded timely and effectively to reports of a missing Soldier on the Land Navigation Course. Local law enforcement did likewise, being fully engaged on the afternoon of the first day. I would characterize the search and rescue effort, coordination, and resource allocation as almost heroic. It is unfortunate that it proved ultimately unsuccessful.



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7. Recommendations. In view of the above findings, I recommend:

a. FLNG should close the current investigation into the training fatality of SPC McLemore with a finding that his death was accidental and a finding of no culpability on the part of CBJTC, RTI-FL, or the BLC leadership and/or cadre.

b. FLNG should formally recognize civilian partners in the search and rescue efforts to reward their extraordinary help and encourage their assistance in the future, to include CCSO, FHP, and other law enforcement agencies who provided tremendous effort on short notice.

c. Although not a factor in this incident, CBJTC should designate responsibility on post to conduct and communicate hourly WBGT readings when Soldiers are conducting field training and it is suspected that the Heat Category Index may be 3 or higher at some point during the day.

(b)(5)

(b)(5)

(b)(5)

g. RTI-FL should continue their extraordinary efforts to emphasize and train heat injury prevention and hydration throughout BLC and other courses.

h. RTI-FL should continue the best practice of allowing students to take personal cell phones on field training as an emergency communications back-up.

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8. The POC for this memorandum is the undersigned at the civilian phone

(b)(6) or e-mail (b)(6)

(b)(6)

Colonel, AD, FLARNG